

CLAIMS

I claim:

1. A spice mill comprising:

- (a) a housing for holding material to be ground;
- (b) a shaft seat connected to a lower end of the housing, the shaft seat being provided with a rotary peg that projects downwardly from the shaft seat;
- (c) inner grinding teeth having a circular arrangement and displaceably seated on the rotary peg, wherein the inner grinding teeth may be driven in a radial direction by the rotary peg;
- (d) a fixed seat positioned below, and rotatably attached to, the shaft seat;
- (e) outer grinding teeth having a circular arrangement and being positioned in proximity to an outer periphery of the inner grinding teeth, wherein the outer grinding teeth are rigidly held within the fixed seat;

wherein the inner grinding teeth are displaceable in an axial direction relative to the outer grinding teeth by means of a lift seat and a rotatable seat positioned below the inner grinding teeth.

2. The spice mill of claim 1, further comprising:

- (a) a convex annular bead arranged on an outer wall of the rotating seat; and
- (b) a concave annular groove located on an inner wall at a lower end of the fixed seat and being sized to receive the convex annular bead,

whereby insertion of the convex annular bead into the concave annular groove results in rotatable connection of the rotating seat to the fixed seat.

3. The spice mill of claim 1, wherein the lift seat is provided with a plurality of outwardly extending spokes, and wherein each of the plurality of spokes is received by one of a plurality of guide grooves provided on an inner wall of the fixed seat.

4. The spice mill of claim 1, wherein the lift seat is provided with a central bore for receiving the rotary peg.

5. The spice mill of claim 1, wherein the lift seat is provided with a downwardly extending threaded peg that may be screwed into a threaded bore provided in the rotating seat.
6. The spice mill of claim 5, wherein the rotating seat comprises an adjustment ring able to be engaged from an exterior of the mill and wherein rotation of the adjustment ring is transmitted to the threaded bore provided in the rotating seat and, by way of the threaded peg, is converted into an infinite vertical movement of the lift seat along a central axis, whereby the inner grinding teeth are moved vertically towards or away from the outer grinding teeth to change the fineness of ground particles produced by the mill.
7. The spice mill of claim 1, wherein the inner grinding teeth are pressed downwards onto the lift seat by a spring.
8. The spice mill of claim 1, wherein the inner grinding teeth are provided with a bore for receiving the rotary peg of the shaft seat, and the bore and the rotary peg each have a polygonal cross section.
9. The spice mill of claim 8, wherein the bore and the rotary peg each have a rectangular cross section.